

in western New York, Michigan, Wisconsin, Minnesota, Iowa, eastern North and South Dakota, and perhaps southern Alaska. Amount obtained, 20 bushels.

Reprinted from Inventory No. 4. See Carleton, Bull. 23, Div. Bot.: 21.

## 2789. TRITICUM DICOCCUM.

**Emmer.**

From Russia. Received March, 1899, through Mr. M. A. Carleton.

*Yaroslaf Spring.* From the government of Yaroslaf. Mean annual rainfall a little over 20 inches; for the growing season (May to September, inclusive), a little more than 12 inches. Soil, sandy, with considerable clay, but very little humus. Sown in Yaroslaf about May 1, but in this country should be sown earlier, depending, however, upon the latitude where tried. Period of growth, 108 to 112 days. Seed should always be drilled in, at the rate  $2\frac{1}{2}$  to  $2\frac{1}{2}$  bushels per acre. A hardy cereal, little known in this country, but considered a very valuable one in parts of Russia. The hull remains on the seed similarly as in oats and barley. The seed is used both for stock feed and for human food; in the latter case in the form of gruel. It is a variety of *Triticum dicoccum*, called correctly "emmer," but known also as Russian spelt. The Russian name is "polba." Adapted for trial in all States from New York to the Dakotas and Kansas and in Washington and Oregon. Amount obtained, 18 bushels.

Reprinted from Inventory No. 4. See Carleton, Bull. 23, Div. Bot.: 27.

## 2790. SECALE CEREALE.

**Rye.**

From Russia. Received March, 1899, through Mr. M. A. Carleton.

*Teshitin Winter.* From the government of Tver. Annual rainfall, 18 to 21 inches; for the growing season (May to September, inclusive), 11 or 12 inches. Soil, a sandy clay and very poor. Harvested July 12 to 15. An excellent variety of rye, well adapted to all the States from New York to the Dakotas and southward to Kentucky and Kansas, and possibly to southern Alaska. Amount obtained, 18 bushels.

Reprinted from Inventory No. 4. See Carleton, Bull. 23, Div. Bot.: 23.

## 2791. TRITICUM VULGARE.

**Wheat.**

From Russia. Received March, 1899, through Mr. M. A. Carleton.

*Yaroslaf Winter.* From the government of Yaroslaf. Mean annual rainfall near 21 inches; for the growing season (May to September, inclusive),  $11\frac{1}{2}$  to 12 inches. Soil, a strong clay, well manured and well drained. Sown September 9; harvested July 24. Yield, about 18 bushels per acre. A semihard red wheat, which ought to be rather resistant to severe winters. Should be tried in Iowa, eastern South Dakota, northern Nebraska, Michigan, southern Wisconsin and Minnesota, and northern New York, to replace spring wheat, if possible. Amount obtained, 9 bushels.

Reprinted from Inventory No. 4. See Carleton, Bull. 23, Div. Bot.: 23.

## 2792. TRITICUM VULGARE.

**Wheat.**

From Russia. Received March, 1899, through Mr. M. A. Carleton.

*Yaroslaf Winter.* From the government of St. Petersburg. Mean annual rainfall,  $18\frac{1}{2}$  inches; for the growing season (May to September, inclusive),  $10\frac{1}{2}$  inches. Mean annual temperature,  $38.6^{\circ}$ . Soil, a clay loam, rich in humus. Sown in well-prepared ground September 4, and harvested July 24. Yield, 20 bushels per acre. A semihard red wheat, which should be very resistant to winter cold. Should be tried in northern New York, Wisconsin, Minnesota, Iowa, western North and South Dakota, and southern Alaska, to replace spring wheat, if possible. Amount obtained, 9 bushels.

Reprinted from Inventory No. 4. See Carleton, Bull. 23, Div. Bot.: 20.

## 2793. HORDEUM VULGARE.

**Barley.**

From Russia. Received March, 1899, through Mr. M. A. Carleton.

*Kostroma Spring.* From the government of Kostroma. Mean annual rainfall, about 20 inches; for the growing season (May to September, inclusive), 12 inches. Soil, sandy clay loam, well manured. Sown during the first week of May, about  $1\frac{2}{3}$  bushels per acre. Ripens in 88 days. Yields about 26 bushels per acre. In Russia